

REMARKS

Reconsideration is requested in view of the above amendments and the following remarks. Claims 25, 26, 28, 30, 31, and 33 are amended. New claim 37 is added. Claims 25-37 are pending.

Claims 25-36 are rejected under 35 USC 103(a) as being unpatentable over MacCorkell (US 3,353,474) in view of Blanc et al. (US 5,755,149), Illy (US 4,254,694) and Grykiewicz (US 5,287,797). Applicant respectfully traverses this rejection, and reconsideration is requested.

The claims recite a pouch for use in a coffee machine to prepare coffee. The pouch is configured to be received in a well section of the machine. In use, the pouch is inserted into the machine, and hot water is fed to the pouch. Coffee extract that is formed in the pouch will leave the pouch via the bottom of the pouch in those areas where the pouch does not contact the bottom of the well section.

The dimensions of the pouch are chosen so that an optimum extraction efficiency of the ground coffee may be achieved in a relatively short time using a relatively small water pressure. Applicant has discovered that if the outer diameter of the pouch is approximately equal to 74 mm and the diameter of the coffee bed formed in the pouch is approximately equal to 61 mm, optimal extraction efficiency can be achieved.

Because the coffee bed has a diameter of approximately 61 mm, the average thickness of the coffee bed is sufficient for a good extraction of the ground coffee in a relatively short time of, for example, around 45 seconds. In the event the diameter of the coffee bed is made smaller, the thickness of the coffee bed would be higher. This implies that the flowrate through the coffee bed will decrease so that the time for preparing a cup of coffee will increase. Furthermore, the pressure drop over the coffee bed would increase. The increased pressure in the coffee bed influences the extraction process in a negative way meaning that the taste of the coffee extract will become too bitter. In order to compensate for the increased extraction time, the pressure under which water is fed to the container may be increased. Such an increased pressure will however result in a more costly coffee machine which needs a stronger pump. Furthermore, such an increase will result in an even higher pressure drop over the coffee bed having the same disadvantages as discussed above.

If the diameter of the coffee bed is smaller than 61 mm, a lower flow rate results. In contrast, if the coffee bed has a diameter higher than 61 mm, the coffee bed will become

relatively thin. This will allow the amount of water to pass the coffee bed relatively quickly, and in turn, result in a lower extraction time with only a limited extraction of the ground coffee. Furthermore, the coffee bed near the endless sealing seam of the pouch will become so thin that the flow resistance of this part of the coffee bed will be very low. This implies that a relatively large part of the amount of water which is fed to the container will pass the pouch through this relatively thin part of the coffee bed. This will result in a coffee extract which is rather tasteless. In other words the central part of the coffee bed will only be extracted by a relatively small amount of water.

It follows that the selected diameter of the coffee bed of approximately 61mm provides an optimum extraction sufficiency in a relatively short time with a relatively low pressure.

Because the diameter of the pouch is approximately 74mm the width of the annular sealing seam is such that, in use, the bypass effect is prevented. This means that it is avoided that, in use, water will flow around the coffee bed without being extracted to the outflow opening of the container. For this reason, as recited in claim 37, the container has an annular bottom part which corresponds with the dimensions of the pouch. Similarly the container has a bowl-shaped innerspace having a diameter which corresponds with the diameter of the coffee bed of the pouch. A smaller outer diameter of the pouch will increase the risk of bypass. A larger outer diameter of the pouch will demand extra and unnecessary filter paper thereby unnecessarily increasing the costs of the pouch. Such unnecessary costs are highly undesired because the pouch is a high volume, single use product.

With Applicant's pouch, a cup of coffee can be prepared wherein the ground coffee is extracted in an optimal efficiency manner. Furthermore, the taste of the coffee extract obtained is surprisingly excellent.

Turning now to the prior art, MacCorkell discloses a beverage dispenser that utilizes a bag 42, 64 containing coffee. The bag is disposed in a brewing chamber 40, 61, 62. As shown in Figures 2 and 3, the bag 42, 64 does not include a central portion that is adapted to lay flat in the brewing chamber. Instead, there is significant space between the bottom of the bag and the brewing chamber. The bag is not designed to fit closely within the brewing chamber, and the bag does not have the dimensions as claimed.

Blanc et al. discloses a machine for preparing coffee. The machine utilizes a coffee package 8 that is disposed within a container. However, the package does not include a central

portion that is adapted to lay flat in the brewing chamber. Nor is the bag designed to fit closely within the brewing chamber, and does not have the dimensions claimed.

Illy discloses a coffee machine that utilizes a coffee pod P that is held between two cupped members 1, 2. The pod P and the members 1, 2 are sized to leave compartments C, C' between the bottom of the pod and a filter 4 and the bottom surface of the cupped member 2 (col. 3, lines 3-12). In fact, Illy discloses that it is important for the pod to be out of contact with the surfaces of the members 1, 2 (col. 2, line 67 to col. 3, line 2). The pod P does include a flat annular sealing portion.

Grykiewicz et al. discloses a brew basket for a coffee machine into which a package of coffee 16 is placed. However, Grykiewicz et al. does not teach an annular sealing portion as claimed, nor a package that has the dimensions as claimed.

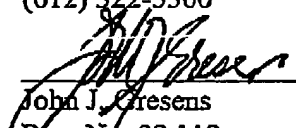
The claims are not suggested by the combination of MacCorkell, Blanc et al., Illy, and Grykiewicz. These proposed combination of references do not teach a pouch with a central portion and annular sealing portion as claimed. Nor do the references, either individually or in combination, suggest the pouch dimensions as claimed. For at least these reasons, the claims are patentable over MacCorkell, Blanc et al., Illy, and Grykiewicz. Withdrawal of the rejection and allowance of all pending claims is respectfully requested.

In Conclusion

With these amendments Applicants believe that the claims now pending in this patent application are in immediate condition for allowance. Favorable consideration is respectfully requested. If any further questions arise, the Examiner is invited to contact Applicants' representative at the number listed below.

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S/N 09/955,798

PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	DIJS	Examiner:	WEINSTEIN
Serial No.:	09/955,798	Group Art Unit:	1761
Filed:	SEPTEMBER 19, 2001	Docket No.:	9424.201USC1
Title:	ASSEMBLY FOR USE IN A COFFEE MACHINE FOR PREPARING COFFEE, CONTAINER AND POUCH OF SAID ASSEMBLY		

Marked-up Copy Showing Changes MadeIn the Claims

Claims 25, 26, 28, 30, 31, and 33 have been amended as follows.

25. (Amended) A pouch for use in preparing coffee in [a container of] a coffee machine having a well section configured to receive the pouch therein, the well section including a bottom with a plurality of radially extending, channel-shaped grooves, [and for preparing coffee by the passage of water therethrough,] comprising:

[the container having a well section therein;]

said pouch being formed from filter paper and holding coffee grounds;

said pouch having a pill-shaped central portion, said central portion being surrounded by a flat annular sealing portion[;

wherein], and the central portion of said pouch is [adapted] configured to [lay flat in said well of said container while said sealing portion directs all water through said pouch] rest on the bottom of the well section whereby, during use, water fed to the top of the pouch can only flow out of the pouch where the pouch does not contact the bottom. 7/12

26. (Amended) The pouch according to claim 25 wherein a bottom of the pouch has a shape substantially corresponding to the shape of the well section of the container.

28. (Amended) The pouch according to claim 27 wherein the dimensions of the bottom disk-shaped sheet from a center of the sheet to the annular sealing portion correspond to the dimensions of the well section.

30. (Amended) The pouch according to claim 25 wherein the [diameter of the inner space of the] container includes an inner space having a diameter that is approximately equal to the diameter of the pouch.

31. (Amended) The pouch according to claim 25 wherein the diameter of said central portion of said pouch is about [74] 61 mm.

33. (Amended) A pouch for use in preparing coffee by the passage of water therethrough [a container of] in a coffee machine [and for preparing coffee by the passage of water therethrough] having a well section configured to receive the pouch therein, the well section including a bottom with a plurality of radially extending, channel-shaped grooves, [the container having a well section therein] ^{said pouch} comprising:

said pouch being formed from filter paper and holding coffee grounds;

said pouch having a pill-shaped central portion, said central portion being surrounded by a flat annular sealing portion;

said pouch comprising a ^{pair of what} pair of substantially conforming to the well section and oppositely disposed disk-shaped portions, interconnected at said annular sealing portion; and

[whereby] the central portion of said pouch is [adapted] configured to [lay flat in said well of said container while said sealing portion directs all water through said pouch] rest on the bottom of the well section whereby, during use, water fed to the top of the pouch can only flow out of the pouch where the pouch does not contact the bottom.

New claim 37 has been added as follows:

37. (New) A pill shaped pouch manufactured from filtering paper and filled with ground coffee for preparing coffee in a coffee machine ^{wherein} whereby, the pouch is arranged to be used in a container having a bowl-shaped inner space bounded by a bottom having at least one outlet opening and a vertical sidewall wherein the bottom consists of an outer horizontally directed annular bottom part bounding the sidewall and an inner saucer-shaped bottom part bounding an inner edge of the annular bottom part, the saucer-shaped bottom part adjacent the annular bottom part sloping downwards in a direction away from the sidewall, wherein the

diameter of the inner space of the container is approximately equal to 74 mm, and the diameter of the inner saucer-shaped bottom part is approximately 61 mm and that the pouch comprises a disk-shaped top sheet and a disk-shaped bottom sheet which are interconnected adjacent their longitudinal edges, the interconnected parts of the top and bottom sheets forming an annular sealing seam wherein the diameter of the pouch is approximately equal to 74 mm, the diameter of a coffee bed formed in the pouch is approximately equal to 61 mm, the annular sealing seam has dimensions substantially corresponding to the dimensions of the annular bottom part and wherein dimensions of the disk-shaped bottom sheet from a center of the sheet to the annular sealing seam correspond to dimensions of the saucer-shaped bottom part wherein a bottom of the pouch which bottom is formed by the bottom sheet, comprises a shape substantially corresponding to the shape of the bottom of the container.